



- NOTES:
- THIS IS A UHV PART, ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE PART NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.
 - CHAMBER ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2 X 10⁻¹⁰ STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS
ALCATEL SAM-110TCL
Du PONT CEC 24-120B
VARIAN MS-9, MS-90 OR MS-18
CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.
FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION ON THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
 - KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
 - DIMENSIONS IN [] ARE MILLIMETERS
 - SHIELDED CAN SHALL BE TO SLIDE FREELY
 - THIS UHV PART MUST BE BAKEABLE TO 170 C.

- ASSEMBLY PROCEDURE:
- WELD 4.0" TUBE (ITEM 3) TO 8.0" FLANGE (ITEM 1)
 - SLIDE SHIELDED CAN IN PLACE -
[WELD 5.25" TUBE (ITEM 4) TO END PLATE (ITEM 6)
AND INSERT LEAD COIL (ITEM 5)].
 - WELD 4.0" TUBE (ITEM 3) TO 6.0" FLANGE (ITEM 2).

A2267600	6	P4105090602-310203-01	U2 TRANSITION PIPE 1-ID-C, END PLATE	304 SS	1
A2272800	5	P4105090602-310401-01	U2 TRANSITION PIPE 3-ID-C, LEAD COIL	LEAD GRADE "C"	1
	4		TUBING : 5.25[133.35] O.D. x .125[3.17] WALL	304 SS	1
	3		TUBING : 4.00[100.00] O.D. x .125[3.17] WALL	304 SS	1
	2		ROTATABLE FLANGE: 6" O.D. x 4.00 I.D. MDC'S CAT. 10026	304 SS	1
A2265400	1	P4105090602-310201-01	U2 FLANGE: 8" O.D. x 4.00 I.D.	304 SS	1
LOG NO.	ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES TOLERANCES: DECIMAL ANGULAR X - .125 (3.175) ± .015 XX - .005 (0.127) ± .001 XXX - .001 (0.025) ± .0005 SURFACE ROUGHNESS 125 REMOVE ALL BURRS AND BREAK SHARP EDGES (R3 MAX.) SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST AMS 4941 DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ASME Y14.5		LOG NUMBER A2272900 DESIGNED BY CORCUERA CHECKED BY T. SANCHEZ DATE 5/15/95 PROJECT MGR. APPROVED/RELEASED DATE 5/18/95		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY ADVANCED PHOTON SOURCE U2 TRANSITION PIPE 3-ID-C ASSEMBLY DRAWING NUMBER P4105090602-310400-00	
SCALE 1=1 SHEET 1 of 1		SIZE D			

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
	REVISIONS			